

Building and Development

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March 30, 2021

Nikki L. Roberts, P.E. Risk Analysis Branch Chief Mitigation Division, Region 3 nikki.roberts@fema.dhs.gov

Re: LOMA Case No. 21-03-0397A & LOMA-DEN Case No. 21-03-0579A

Dear Ms. Roberts:

It is critical that the best available data that is representative of actual field conditions be used for a LOMA determination. In that vein, we request that the above-referenced cases be re-evaluated using the 2-D data submitted by Wood PLC instead of an interpolation of the results of that data in the form of published Base Flood Elevations (BFEs) on the Flood Insurance Rate Map (FIRM). As you know, the County is committed to investing several million dollars to resolve a significant and dangerous flood risk in the Selma Estates subdivision. As such, it is imperative that the LOMA determination be as accurate as possible.

In 2018, former Representative Barbara Comstock's office contacted the Federal Emergency Management Agency (FEMA) to initiate a re-evaluation of the floodplain boundary in the areas that had experienced recurring flooding. FEMA found the floodplain was not properly delineated and issued a revision to the Flood Insurance Rate Map (FIRM) that became effective in June 2019 (19-03-0018P). This resulted in homes not previously located within (or in proximity to) the floodplain at the time of purchase, be required to comply with the mandatory flood insurance requirements of the National Flood Insurance Program (NFIP).

To further assess the potential for flooding, the County contracted with a third-party consultant, Wood PLC. (Wood), to conduct a detailed watershed analysis. This effort more definitively characterized flood risk and surveyed the site conditions that exist. Wood's watershed analysis was published in November 2019.

On behalf of the County, Wood initiated another Letter of Map Revision (LOMR) based on the data, including 2-D modeling, from the watershed analysis. As a result, LOMR 20-03-0748P became effective in December 2020. Subsequently, the County submitted a grant application to the Flood Mitigation Assistance program based on this data. The County has relied on the Wood watershed analysis and corresponding data to provide objective resolution strategies.

In December 2020, the County submitted a request for a Letter of Map Amendment (LOMA). On February 2, 2021, the County received the Determination Documents for removal and non-removal, and the results were unexpected. Although current LOMA determination practices only publish Base Flood Elevations and accompanying Flood Insurance Study exhibits (including the flood profile), our research has discovered that the 2-D data provides better detail of the 1% Annual Exceedance Probability Water-Surface Elevations (WSELs) across the site.

The interpolation method resulted in the removal and non-removal determinations for homes in our project's area that the 2-D data does not support. Further, the WSEL for many of the homes that are not removed varies up to several feet between the actual data and the interpolated results of the LOMA. These differences have various implications, including but not limited to, the project scope including all homes at risk, analysis of appropriate mitigation for individual homes, and impacts the homeowner awareness of risks associated with flood events.

The County anticipated that FEMA would rely on the data supporting the approved LOMR to finalize LOMA determinations. In order to have the LOMA determination reflect the actual field conditions, I request that LOMA Case No. 21-03-0397A & LOMA-DEN Case No. 21-03-0579A be reevaluated using the 2-D data instead of an interpolation of the results of that data in the form of published BFEs on the FIRM.

I understand that this situation is uncommon, and that FEMA's guidance continues to evolve on how best to capture 2-D flow dynamics on the FIRM. However, the use of the Wood PLC submitted data is significant as it provides a better understanding of the situation at the Selma Estates community.

Please let me know if there is additional data, information or other assistance that I can provide to expeditiously process this request.

Sincerely,

Alan Brewer

Director, Loudoun County Department of Building and Development

cc: Board of Supervisors

Tim Hemstreet, County Administrator

Valmarie Turner, Assistant County Administrator

Maggie Auer, Floodplain Administrator / Floodplain Team Leader

Ryan Reed, Natural Resources Team Leader